

4/24/2018

Print



Dart Hawkesbury
1270 Aberdeen St Hawkesbury, ON K6A 1K7 Canada
Tel (613) 632-5200

Purchasing Receipts

PO No	Supplier	Line Item No	Rel No	Terms	Purchased Item	Description	For Part No	Project	Equipment ID	Order Qty	Due Date	Received Quantity	Accounting Job No	Container No	Status	Receive Date	Price/Unit	Aging Days	Past Due	Tc	
PO039632	ACI001-VC	1	1	Net 30	M6061T6S.625	6061-T6 .625 Sheet : MATERIAL: 6061-T6/T62 ALUMINUM SHEET AS PER QQ-A-250/11 OR AMS-QQ-A-250/11 OR AMS 4025 OR AMS 4027 OR ASTM B209 receive sf				16	4/20/2018	16		S064689	Stock	4/24/2018	\$ 34.98 / sf	0		\$5	
		2			M6061T6S.250	6061T6 Sheet .250 : MATERIAL: 6061-T6/T62 ALUMINUM SHEET AS PER QQ-A-250/11 OR AMS-QQ-A-250/11 OR AMS 4025 OR AMS 4027 OR ASTM B209 receive sf				32		32		S064690	Stock	4/24/2018	\$ 12.30 / sf	0		\$2	
Total:										48		48									\$74

Plex 4/24/2018 2:21 PM Dart.Dubois.Pascal



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER **PO039632**

Supplier: ACI001-VC
Acier Ouellette Inc.
935 Boul. Du Havre
Valleyfield
QC
J6S 5L1 Canada
Phone: 800 667 4248
Fax: 450 377 5696

PO No: PO039632

PO Date: 4/18/18

Due Date: 4/20/18

**Purchase Order
Revision:**

Revision Date:

Ship-To Contact: Lavoie, Chantal
clavoie@dartaero.com

E-MAILED
APR 18 2018

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Ground

Pynt Terms: Net 30

Freight Terms:

Special Comments: quote: SOU0098788

Items

Line Item	Part	Supplier Part No	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	M6061T6S.625		6061-T6 .625 Sheet : MATERIAL: 6061-T6/T62 ALUMINUM SHEET AS PER QQ-A-250/11 OR AMS-QQ-A-250/11 OR AMS 4025 OR AMS 4027 OR ASTM B209 receive sf	Firmed	4/20/18	16 sf	0 sf	16 sf	\$34.98/sf	\$559.68
2	M6061T6S.250		6061T6 Sheet .250 : MATERIAL: 6061-T6/T62 ALUMINUM SHEET AS PER QQ-A-250/11 OR AMS-QQ-A-250/11 OR AMS 4025 OR AMS 4027 OR ASTM B209 receive sf	Firmed	4/20/18	32 sf	0 sf	32 sf	\$12.295625/sf	\$393.46
3	M1018S.375		M1018S.375 : AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21, 38W/44W/50W/60W/70W NO SCALE ON SHEET MINIMUM YIELD TENSILE STRENGTH= 28KSI MINIMUM ULIMATE TENSILE STRENGTH= 42KSI COLD ROLLED receive sf	Firmed	4/20/18	16 sf	0 sf	16 sf	\$13.8275/sf	\$221.24

Items

Line Item	Part	Supplier Part No	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
4	M6061T6R1.000		Round Bar 1.00" : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM ROUND BAR AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117 4128/4115/4116 OR QQ-AA-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B221 OR ASTM B221 receive ft	Firmed	4/20/18	40 ft	0 ft	40 ft	\$2.7375/ft	\$109.50
5	M4140H-R1.250		4140 Round Bar 1.250 : AISI 4140H ROUND BAR PER AISI 4140 OR ASTM A304-02/-A-434-BC/-A193-03-GRADE B7/-A29-03/-A322-91 OR UNS#-G41400 MINIMUM ULTIMATE TENSILE STRENGTH=100 KSI MINIMUM YIELD TENSILE STRENGTH=66KSI receive ft	Firmed	4/20/18	20 ft	0 ft	20 ft	\$6.921666/ft	\$138.43
Line Item Note NOTE CUT ROUND BAR IN HALF										
6	M6061T6S0.750X06.500		6061T6 Sheet 0.750 X 6.500 : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft	Firmed	4/24/18	12 ft	0 ft	12 ft	\$30.3275/ft	\$363.93
7	M303R1.000		303 Round Bar 1.00 : MATERIAL: AISI 303 SS ROUND BAR AS PER ASTM A582 NOTE: 304/316 NOT ACCEPTABLE receive ft	Firmed	4/20/18	12 ft	0 ft	12 ft	\$8.4358333/ft	\$101.23
8	M303B1.000X1.000		M303B1.000 X 1.000 : MATERIAL: AISI 303 SS BAR AS PER ASTM A582 NOTE: AISI 304/316 NOT ACCEPTABLE receive ft	Firmed	5/2/18	12 ft	0 ft	12 ft	\$39.10/ft	\$469.20
9	M303R0.750		303 Round Bar 0.750 : MATERIAL: AISI 303 SS ROUND BAR AS PER ASTM A582 NOTE: 304/316 NOT ACCEPTABLE receive ft	Firmed	4/20/18	12 ft	0 ft	12 ft	\$4.8508333/ft	\$58.21

Items

Line Item	Part	Supplier Part No	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
10	M5052H32S.050		5052-H32 .050 Sheet : MATERIAL: 5052-H32 ALUMINUM SHEET AS PER QQ-A-250/8 OR AMS-QQ-A-250/8 OR AMS 4016 OR ASTM B209 receive sf	Firmed	4/24/18	40 sf	0 sf	40 sf	\$2.6275/sf	\$105.10
11	M5052H32S.080		5052-H32 .080 Sheet : MATERIAL: 5052-H32 ALUMINUM SHEET AS PER QQ-A-250/8 OR AMS-QQ-A-250/8 OR AMS 4016 OR ASTM B209 receive sf	Firmed	4/20/18	32 sf	0 sf	32 sf	\$4.175625/sf	\$133.62
12	M2024T3S.063		2024-T3 .063 Sheet : MATERIAL: 2024-T3 ALUMINUM SHEET AS PER QQ-A-250/4 OR AMS-QQ-A-250/4 OR AMS 4037 OR ASTM B209 receive sf	Firmed	4/25/18	144 sf	0 sf	144 sf	\$9.8660416/sf	\$1,420.71
13	M304B0.625X3.000		304 Bar .625 X 3.00 : MATERIAL: AISI 304/316 SS BAR OR AISI 304/316 SS PLATE AS PER ASTM A276 OR ASTM A240 NOTE: AISI 303 NOT ACCEPTABLE receive ft	Firmed	4/25/18	12 ft	0 ft	12 ft	\$36.745833/ft	\$440.95
14	M304S16GA		304/316 Sheet .063 : MATERIAL: AISI 304/316 SS SHEET ANNEALED AS PER MIL-S-5059 OR AMS 5513 (304) OR AMS 5524 (316) OR ASTM A240 OR ASME SA240 receive sf	Firmed	4/20/18	160 sf	0 sf	160 sf	\$6.508625/sf	\$1,041.38
Grand Total:										\$5,556.64

Order Notes

Procurement Quality Clauses
A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)
A026 certification of material conformance
A041 quality management system
A042 dart notification by supplier
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.



Plex 4/18/18 7:40 AM dart.lavoie.chantal



ACIER OUELLETTE INC.

935, Boul. du Havre
Salaberry de Valleyfield (Québec) J6S 5L1
Tél.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248
Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

Order - Customer

CO00084763

Billed to

DART AEROSPACE LTD
1270, ABERDEEN ST.
HAWKESBURY, Ontario, K6A 1K7

Shipped to

, Ontario,
Att: CHANTAL LAVOIE Tél.: 613-632-5200

Customer N°
Date
Delivery date
Your order N°
Processed by
Salesman
Carrier
Credit Terme

CLI0001056
2018/04/19
2018/04/24 12:00:00 AM
po039632
Denis Quenneville
OUELLETTE VALLEYFIELD
Net 30 Days

Delivery Route 5

Product Description	Weight	Qty	UM	PCS NB			Internal Use Only		
				CMD	EXP	B/O	IN	I	S C
1 ALU PLATE 5/8 6061-T651 RANDOM PAL-586061-V 4298 TRANSIT 23/4 HEAT: 17CN-E-1597 COUPE A LA SCIE SCIE 1 pl. 4' x 4'	144.32	16.00	PI2_\$CLB	0.00			16		
2 ALU PLATE 1/4 6061-T651 (4 X 8) PAL-14486061 transfert 18/4 HEAT: 003934	117.12	32.00	PI2_\$CLB	0.00			32		
3 PALETTE PALETTE sur skid de bois		1.00	UN_\$UN	0.00					

Total Weight (LBS): 261.44 NIR: R-109516-6

Conditions:

All sold and delivered materials remain the property of "Acier Ouellette Inc." until payment is made in full, complete and cashed. All lost materials are at the buyer's expense. The warranty offered by "Acier Ouellette Inc." is the same as offered and honored by the manufacturer and his warranty is transferred by "Acier Ouellette Inc." to the client. The buyer hereby accepts to respect the following conditions: Net 30 days from billing date and the buyer accepts to pay administration charges of 2% per month (24% per annum) on all past due amounts over 30 days. Any default in respect with this contract will lead to payment by acceleration and permits to the seller, at his choice to claim for the balance due or the repossession of the goods sold. All claims must be made within five (5) days with this document enclosed. Any merchandise that has been damaged, cut or modified cannot be returned. All goods returned must be with our authorization and are subject to a 25% restocking charge.

Prepared By :	Verified By :	Delivered By :	Time	Customer's Signature	Y	M	D
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Total (\$CAD)
Deposit
Balance

1 122.25
0.00
1 122.25

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M6061T65.625
 DATE: APR 23 2018

PO / BATCH NO.: 038632/5064689

MATERIAL CERT REC'D: yes
 QUANTITY RECEIVED: 16 PIR
 QUANTITY INSPECTED: 16 PIR
 QUANTITY REJECTED: 0

THICKNESS ORDERED: .625
 THICKNESS RECEIVED: .625
 SHEET SIZE ORDERED: 4x4
 SHEET SIZE RECEIVED: 4x4

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y (N)	
CORRECT FINISH	(Y) N	
CORROSION	Y (N)	
CORRECT GRAIN DIRECTION	(Y) N	
CORRECT MATERIAL PER M-DRAWING	(Y) N	<u>A57m B209</u>
CORRECT THICKNESS	(Y) N	
PHOTO REQUIRED	Y (N)	
CORRECT REF # TO LINK CERT	(Y) N	<u>Heat # 17CN-E-1597</u>
CORRECT MATERIAL IDENTIFICATION	(Y) N	
CORRECT M# ON THE MATERIAL	(Y) N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y (N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y (N)	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL	HRC	HRB	DUR A	DUR D	WEBSTER
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: <u>DAS</u>	SIGNED OFF BY: _____		
DATE: <u>9-8 APR 23 2018</u>	DATE: _____		

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

SPECIFICATION CONTROL DRAWING

△ PURCHASE MATERIAL: 6061-T6/T62/T651 ALUMINUM SHEET OR PLATE
SPECIFICATION: QQ-A-250/11 OR AMS-QQ-A-250/11
OR AMS 4025 OR 4027
OR ASTM B209

△ PART NUMBER: M6061T6S|XXX|X|W|WWW|
|THK| |WIDTH|

WHERE "XXX" = THICKNESS (IN INCHES)
AND "W.WWW" = WIDTH (IN INCHES, OPTIONAL, FOR SPECIFYING CUT PLATE)
EG. 0.063" THICK SHEET = M6061T6S.063
EG. 3.5" WIDE BY 0.500" THICK PLATE = M6061T6S.500X3.500

△ PREFERRED SIZE: .XXX BY 4FT BY 8FT FOR SHEET

C	ADD PLATE AND T651 SPEC	ML	17.12.13
B	REFORMAT DWG, ADD B209 SPEC (ZN DB-1), REF PAR 06-020A	CP	09.07.13
A	NEW ISSUE	RF	01.06.08
REV.	DESCRIPTION	BY	DATE
DESIGN	DS		
DRAWN	ML		
CHECKED	NO		
MFG. APPR.	JFS		
APPROVED	HS		
DE APPR.	CP		
DATE	17.12.13		

DART AEROSPACE LTD		REV. C
HAWKESBURY, ONTARIO, CANADA		SHEET 1 OF 1
DRAWING NO.	M6061T6S	SCALE
TITLE	6061-T6 SHEET/PLATE SPEC	NTS
COPYRIGHT © 2001 BY DART AEROSPACE LTD		
THIS DRAWING IS UNCLASSIFIED AND IS SUPPLIED ON THE EXPRESS UNDERSTANDING THAT IT IS NOT TO BE USED FOR ANY OTHER PURPOSE WITHOUT THE WRITTEN PERMISSION OF DART AEROSPACE LTD.		

RELEASED
2018 MAR 13
EJS 18-605

APPROVED



MILL TEST / QUALITY CONTROL CERTIFICATE

NORTHEAST LIGHT ALLOY CO. LTD.

ADDRESS: XINJIANG STREET,
PINGFANG DISTRICT
HARBIN

REF: M17064

No. of Invoices: 17NE-594

FAX: 86-451-86808342

TEL: 86-451-86664283



PRODUCT: PRIME ALUMINUM PLATE 6061 T651
TEST DATE: 2017-05-30

1. MATERIAL SPECIFICATION:

Alloy/ Temper	LOT NO.	SIZE(MM/INCH)	N.W. (MT/LBS)	G.W. (MT/LBS)	PCS	PLTS	Order No.	HBAT NO.
6061T651	LTD1097	9.53x1231.9x3670.3 (0.375"x48.5"x144.5")	1.804 3977	1.894 4178	15	1	R153879	17CN-E-1744
6061T651	LTD1097	9.53x1231.9x3670.3 (0.375"x48.5"x144.5")	1.924 4242	2.014 4440	16	1	R153879	17CN-E-1745
6061T651	T00131/T00132 T00136.1	9.53x1231.9x2451.1 (0.375"x48.5"x96.5")	2.466 5437	2.526 5580	31	1	R153879	17CN-E-1736
6061T651	T00140-17/T00141-17 T00142/T00143	9.53x1536.7x3670.3 (0.375"x60.5"x144.5")	1.812 3995	1.912 4215	12	1	R153879	17CN-E-1738
6061T651	T00883	15.88x1231.9x3670.3 (0.625"x48.5"x144.5")	2.792 6155	2.862 6354	14	1	R154148	17CN-E-1647
6061T651	T00884	9.53x1231.9x3670.3 (1.25"x48.5"x144.5")	2.74 6041	2.83 6239	7	1	R154132	17CN-E-1611
6061T651	T00885	50.8x1231.9x3670.3 (2.0"x48.5"x144.5")	1.866 4158	1.976 4356	3	1	R154132	17CN-E-1615
6061T651	T00885	50.8x1231.9x3670.3 (2.0"x48.5"x144.5")	1.86 2778	1.95 2878	2	1	R154132	17CN-E-1616
6061T651	T00888	9.53x1231.9x3670.3 (0.375"x48.5"x144.5")	1.738 3827	1.826 4026	14	1	R154153	17CN-E-1748
6061T651	T00889	12.7x1231.9x3670.3 (0.500"x48.5"x144.5")	2.053 6539	2.148 6838	16	1	R154153	17CN-E-1757
6061T651	T00890	12.7x1231.9x3670.3 (0.500"x48.5"x144.5")	2.112 5317	2.202 6516	15	1	R154153	17CN-E-1746
6061T651	T00891	15.88x1231.9x3670.3 (0.625"x48.5"x144.5")	1.59 3506	1.68 3704	8	1	R154153	17CN-E-1625
6061T651	T00891	15.88x1231.9x3670.3 (0.625"x48.5"x144.5")	1.396 3078	1.484 3276	7	1	R154153	17CN-E-1626
6061T651	T00892	19.05x1231.9x3670.3 (0.75"x48.5"x144.5")	1.928 4250	2.018 4449	8	1	R154153	17CN-E-1632
6061T651	T00892	19.05x1231.9x3670.3 (0.75"x48.5"x144.5")	0.952 2121	1.052 2319	4	1	R154153	17CN-E-1633
6061T651	T00894	12.7x1231.9x3670.3 (0.500"x48.5"x144.5")	2.556 5636	2.646 5833	16	1	R154173	17CN-E-1753
6061T651	T00898	12.7x1231.9x2451.1 (0.500"x48.5"x96.5")	2.478 5463	2.638 5896	23	1	R154173	17CN-E-1735

PAC 581

6061T651	T00899	12.7x1231.9x2451.1 (0.500"x48.5"x98.5")	2.574 5675	2.834 5807	24	1	R154173	17CN-E-1734
6061T651	T00905	19.05x1231.9x3670.3 (0.75"x48.5"x144.5")	2.15 4740	2.24 4938	9	1	R154173	17CN-E-1684
6061T651	T00906	19.05x1231.9x3670.3 (0.75"x48.5"x144.5")	2.396 5252	2.486 5481	10	1	R154173	17CN-E-1682
6061T651	T00906	19.05x1231.9x3670.3 (0.75"x48.5"x144.5")	1.918 4228	2.008 4427	8	1	R154173	17CN-E-1683
6061T651	T00907	19.05x1231.9x3670.3 (0.75"x48.5"x144.5")	1.434 3161	1.524 3360	6	1	R154173	17CN-E-1686
6061T651	T00908	19.05x1231.9x3670.3 (0.75"x48.5"x144.5")	1.918 4228	2.008 4427	8	1	R154173	17CN-E-1617
6061T651	T00908	19.05x1231.9x3670.3 (0.75"x48.5"x144.5")	2.156 4753	2.246 4952	9	1	R154173	17CN-E-1618
6061T651	T00913	25.4x1231.9x3670.3 (1.0"x48.5"x144.5")	1.592 3510	1.682 3708	5	1	R154173	17CN-E-1672
6061T651	T00913	25.4x1231.9x3670.3 (1.0"x48.5"x144.5")	1.588 3498	1.676 3696	5	1	R154173	17CN-E-1681
6061T651	T00914	25.4x1231.9x3670.3 (1.0"x48.5"x144.5")	1.594 3514	1.684 3713	5	1	R154173	17CN-E-1661
6061T651	T00914	25.4x1231.9x3670.3 (1.0"x48.5"x144.5")	1.596 3516	1.686 3717	5	1	R154173	17CN-E-1662
6061T651	T00915	25.4x1231.9x3670.3 (1.0"x48.5"x144.5")	1.81 3548	1.7 3748	5	1	R154173	17CN-E-1663
6061T651	T00915	25.4x1231.9x3670.3 (1.0"x48.5"x144.5")	1.284 2831	1.374 3029	4	1	R154173	17CN-E-1664
6061T651	T00136/T00136-1/T00129-1	9.53x1231.9x3670.3 (0.375"x48.5"x144.5")	1.446 3188	1.536 3385	12	1	R154295	17CN-E-1739
6061T651	T01179	12.7x1231.9x3670.3 (0.500"x48.5"x144.5")	1.9 4189	1.99 4587	12	1	R154295	17CN-E-1691
6061T651	T01180	12.7x1231.9x3670.3 (0.500"x48.5"x144.5")	2.41 5313	2.5 5512	13	1	R154295	17CN-E-1692
6061T651	T01187	19.05x1231.9x3670.3 (0.75"x48.5"x144.5")	2.42 5336	2.51 5534	10	1	R154295	17CN-E-1590
6061T651	T01192	9.53x1231.9x2451.1 (0.375"x48.5"x98.5")	1.718 3788	1.778 3920	21	1	R154318	17CN-E-1693
6061T651	T01193	9.53x1231.9x2451.1 (0.375"x48.5"x98.5")	1.438 3170	1.498 3302	18	1	R154318	17CN-E-1752
6061T651	T00861	9.53x1536.7x3670.3 (0.375"x60.5"x144.5")	1.97 4343	2.07 4564	13	1	R154318	17CN-E-1514
6061T651	T00861	9.53x1536.7x3670.3 (0.375"x60.5"x144.5")	1.96 4321	2.06 4541	13	1	R154318	17CN-E-1515
6061T651	T00862	9.53x1536.7x3670.3 (0.375"x60.5"x144.5")	1.95 4299	2.05 4519	13	1	R154318	17CN-E-1516
6061T651	T00862	9.53x1536.7x3670.3 (0.375"x60.5"x144.5")	1.8 3968	1.9 4189	12	1	R154318	17CN-E-1517
6061T651	T00863	9.53x1536.7x3670.3 (0.375"x60.5"x144.5")	1.5 3307	1.6 3527	10	1	R154318	17CN-E-1584
6061T651	T00863	9.53x1536.7x3670.3 (0.375"x60.5"x144.5")	1.9 3307	1.9 3527	10	1	R154318	17CN-E-1585



6061T651	T00864	9.53x1538.7x3670.3 (0.375"x60.5"x144.5")	1.49 3285	1.59 3505	10	1	R154318	17CN-E-1518
6061T651	T00864	9.53x1538.7x3670.3 (0.375"x60.5"x144.5")	1.49 3285	1.59 3505	10	1	R154318	17CN-E-1519
6061T651	T01203	15.88x1231.9x3670.3 (0.625"x48.5"x144.5")	1.406 3100	1.495 3298	7	1	R154318	17CN-E-1596
6061T651	T01205	15.88x1231.9x3670.3 (0.625"x48.5"x144.5")	1.402 3091	1.492 3289	7	1	R154318	17CN-E-1597
6061T651	T01206	15.88x1231.9x3670.3 (0.625"x48.5"x144.5")	1.396 3078	1.488 3276	7	1	R154318	17CN-E-1599
6061T651	T01206	15.88x1231.9x3670.3 (0.625"x48.5"x144.5")	1.2 2646	1.29 2844	6	1	R154318	17CN-E-1600
6061T651	T01236	25.4x1231.9x3670.3 (1.0"x48.5"x144.5")	1.582 3458	1.672 3588	5	1	R154318	17CN-E-1554
6061T651	T01236	25.4x1231.9x3670.3 (1.0"x48.5"x144.5")	1.268 2795	1.358 2994	4	1	R154318	17CN-E-1555
6061T651	T01241	25.4x1231.9x2451.1 (1.0"x48.5"x96.5")	2.338 5184	2.398 5287	11	1	R154318	17CN-E-1685
6061T651	T00191	50.8x1538.7x3670.3 (2.0"x60.5"x144.5")	1.568 3457	1.588 3577	2	1	R154318	17CN-E-1150
6061T651	T00192	50.8x1538.7x3670.3 (2.0"x60.5"x144.5")	1.562 3444	1.582 3564	2	1	R154318	17CN-E-1139
6061T651	T00193	50.8x1538.7x3670.3 (2.0"x60.5"x144.5")	1.572 3455	1.672 3585	2	1	R154318	17CN-E-1151

2. CHEMICAL COMPOSITION:

LOT NO.	Cu	Mg	Mn	Fe	Si	Zn	Ni	Cr	Ti	Others Total	Al
LT01097	0.19	0.90	<0.15	0.37	0.55	<0.20	<0.05	0.15	<0.10	0.15	Bal
T00131	0.33	1.00	<0.15	0.49	0.65	<0.20	<0.05	0.17	<0.10	0.15	Bal
T00132	0.22	1.00	<0.15	0.41	0.63	<0.20	<0.05	0.16	<0.10	0.15	Bal
T00136-1	0.19	0.97	<0.15	0.48	0.58	<0.20	<0.05	0.18	<0.10	0.15	Bal
T00140-1	0.20	0.97	<0.15	0.39	0.55	<0.20	<0.05	0.16	<0.10	0.15	Bal
LT00141-1	0.21	1.02	<0.15	0.40	0.58	<0.20	<0.05	0.16	<0.10	0.15	Bal
T00140	0.20	1.01	<0.15	0.37	0.59	<0.20	<0.05	0.15	<0.10	0.15	Bal
T9883	0.20	1.01	<0.15	0.37	0.59	<0.20	<0.05	0.16	<0.10	0.15	Bal
T00883	0.24	0.98	<0.15	0.37	0.67	<0.20	<0.05	0.17	<0.10	0.15	Bal
T00884	0.22	1.01	<0.15	0.38	0.68	<0.20	<0.05	0.17	<0.10	0.15	Bal
T00885	0.24	0.98	<0.15	0.37	0.67	<0.20	<0.05	0.17	<0.10	0.15	Bal
T00888	0.21	1.02	<0.15	0.38	0.63	<0.20	<0.05	0.17	<0.10	0.15	Bal
T00889	0.20	0.99	<0.15	0.36	0.63	<0.20	<0.05	0.17	<0.10	0.15	Bal
T00890	0.21	1.08	<0.15	0.42	0.64	<0.20	<0.05	0.17	<0.10	0.15	Bal
T00891	0.22	1.01	<0.15	0.36	0.66	<0.20	<0.05	0.17	<0.10	0.15	Bal
T00892	0.21	1.03	<0.15	0.36	0.63	<0.20	<0.05	0.17	<0.10	0.15	Bal
T00894	0.24	0.98	<0.15	0.37	0.67	<0.20	<0.05	0.17	<0.10	0.15	Bal
T00898	0.22	1.04	<0.15	0.37	0.65	<0.20	<0.05	0.17	<0.10	0.15	Bal
T00899	0.22	1.01	<0.15	0.36	0.66	<0.20	<0.05	0.17	<0.10	0.15	Bal
T00905	0.20	0.99	<0.15	0.35	0.63	<0.20	<0.05	0.17	<0.10	0.15	Bal
T00906	0.20	1.04	<0.15	0.39	0.65	<0.20	<0.05	0.18	<0.10	0.15	Bal
T00907	0.20	1.04	<0.15	0.39	0.65	<0.20	<0.05	0.16	<0.10	0.15	Bal



T00908	0.21	1.03	<0.15	0.38	0.63	<0.20	<0.05	0.16	<0.10	0.15	Bal
T00913	0.22	1.05	<0.15	0.37	0.65	<0.20	<0.05	0.17	<0.10	0.15	Bal
T00914	0.22	1.02	<0.15	0.36	0.66	<0.20	<0.05	0.17	<0.10	0.15	Bal
T00915	0.22	1.01	<0.15	0.38	0.68	<0.20	<0.05	0.17	<0.10	0.15	Bal
T00136	0.19	0.97	<0.15	0.46	0.58	<0.20	<0.05	0.16	<0.10	0.15	Bal
T00130-1	0.19	0.97	<0.15	0.46	0.58	<0.20	<0.05	0.16	<0.10	0.15	Bal
T00129-1	0.21	1.04	<0.15	0.40	0.63	<0.20	<0.05	0.17	<0.10	0.15	Bal
T01179	0.21	1.05	<0.15	0.43	0.64	<0.20	<0.05	0.16	<0.10	0.15	Bal
T01180	0.21	0.97	<0.15	0.39	0.64	<0.20	<0.05	0.16	<0.10	0.15	Bal
T01187	0.21	0.97	<0.15	0.39	0.64	<0.20	<0.05	0.16	<0.10	0.15	Bal
T01192	0.20	1.01	<0.15	0.37	0.60	<0.20	<0.05	0.15	<0.10	0.15	Bal
T01193	0.21	0.97	<0.15	0.39	0.64	<0.20	<0.05	0.16	<0.10	0.15	Bal
T00861	0.22	0.99	<0.15	0.43	0.68	<0.20	<0.05	0.15	<0.10	0.15	Bal
T00862	0.20	1.01	<0.15	0.39	0.62	<0.20	<0.05	0.16	<0.10	0.15	Bal
T00863	0.23	1.01	<0.15	0.43	0.69	<0.20	<0.05	0.17	<0.10	0.15	Bal
T00864	0.20	1.03	<0.15	0.39	0.63	<0.20	<0.05	0.16	<0.10	0.15	Bal
T01205	0.22	1.01	<0.15	0.38	0.66	<0.20	<0.05	0.17	<0.10	0.15	Bal
T01206	0.22	1.04	<0.15	0.37	0.65	<0.20	<0.05	0.17	<0.10	0.15	Bal
T01236	0.21	1.03	<0.15	0.38	0.63	<0.20	<0.05	0.17	<0.10	0.15	Bal
T01241	0.20	0.99	<0.15	0.35	0.63	<0.20	<0.05	0.17	<0.10	0.15	Bal
T00191	0.20	0.93	<0.15	0.36	0.61	<0.20	<0.05	0.15	<0.10	0.15	Bal
T00192	0.20	1.01	<0.15	0.39	0.62	<0.20	<0.05	0.16	<0.10	0.15	Bal
T00193	0.22	0.99	<0.15	0.43	0.68	<0.20	<0.05	0.15	<0.10	0.15	Bal

All figures are weight percent, single figures indicate maxima.

3. MECHANICAL PROPERTIES:

Tensile properties conform to AA specifications and are measured in the transverse direction.

LOT NO.	TENSILE STRENGTH (ksi)	YIELD STRENGTH (ksi)	Percentage elongation after fracture (%)
LT01087	42.9	37.1	18.10
T00181	45.1	39.9	18.70
T00132	45.0	39.9	15.20
T00130-1	43.8	38.6	17.10
T00140-1	44.2	38.4	18.00
LT00141-1	43.8	38.6	17.90
T00140	43.9	38.4	18.00
T0068	44.1	38.7	17.80
T00883	44.1	40.2	15.00
T00884	43.9	39.7	16.80
T00885	45.0	40.9	12.70
T00888	43.5	38.3	17.00
T00889	44.4	39.8	15.40
T00890	44.8	39.8	16.10
T00891	43.8	39.7	15.90
T00892	43.8	39.2	13.20
T00894	44.2	39.2	15.90
T00898	45.0	40.6	16.00
T00899	45.0	40.6	16.60
T00905	44.2	40.2	14.40
T00906	44.7	40.6	14.00
T00907	44.2	39.9	14.40
T00908	44.8	40.0	14.20
T00913	43.2	38.4	15.70



T00014	44.8	40.2	15.10
T00016	43.8	39.7	15.00
T00136	43.9	38.9	15.20
T00130-1	45.0	41.3	13.40
T00129-1	45.0	40.1	15.10
T01179	45.3	40.6	16.20
T01180	44.8	39.9	14.80
T01187	45.0	39.9	16.30
T01192	43.9	38.4	17.80
T01193	44.3	40.0	16.10
T00881	43.2	38.6	16.30
T00882	43.9	38.0	15.70
T00883	42.9	37.4	18.00
T00864	44.6	39.9	16.50
T01205	45.0	41.3	15.80
T01206	44.7	40.8	15.60
T01236	44.2	39.6	14.60
T01241	43.7	39.6	14.50
T00191	46.0	42.1	14.40
T00192	44.2	40.0	13.00
T00193	45.8	41.8	12.50

4. TOLERANCE:

Lot No.	Thickness Tolerance	Width Tolerance	Length Tolerance
LT01097	-0/+0.017 in.	-0/+0.157 in.	-0/+0.157 in.
T00131	-0/+0.017 in.	-0/+0.157 in.	-0/+0.157 in.
T00132	-0/+0.017 in.	-0/+0.157 in.	-0/+0.157 in.
T00136-1	-0/+0.017 in.	-0/+0.157 in.	-0/+0.157 in.
T00140-1	-0/+0.020 in.	-0/+0.157 in.	-0/+0.157 in.
LT00141-1	-0/+0.020 in.	-0/+0.157 in.	-0/+0.157 in.
T00140	-0/+0.020 in.	-0/+0.157 in.	-0/+0.157 in.
T00883	-0/+0.020 in.	-0/+0.157 in.	-0/+0.157 in.
T00883	-0/+0.023 in.	-0/+0.157 in.	-0/+0.157 in.
T00884	-0/+0.039 in.	-0/+0.157 in.	-0/+0.157 in.
T00886	-0/+0.055 in.	-0/+0.157 in.	-0/+0.157 in.
T00888	-0/+0.017 in.	-0/+0.157 in.	-0/+0.157 in.
T00889	-0/+0.023 in.	-0/+0.157 in.	-0/+0.157 in.
T00890	-0/+0.023 in.	-0/+0.157 in.	-0/+0.157 in.
T00891	-0/+0.023 in.	-0/+0.157 in.	-0/+0.157 in.
T00892	-0/+0.031 in.	-0/+0.157 in.	-0/+0.157 in.
T00894	-0/+0.023 in.	-0/+0.157 in.	-0/+0.157 in.
T00896	-0/+0.023 in.	-0/+0.157 in.	-0/+0.157 in.
T00899	-0/+0.023 in.	-0/+0.157 in.	-0/+0.157 in.
T00906	-0/+0.031 in.	-0/+0.157 in.	-0/+0.157 in.
T00906	-0/+0.031 in.	-0/+0.157 in.	-0/+0.157 in.
T00907	-0/+0.031 in.	-0/+0.157 in.	-0/+0.157 in.
T00908	-0/+0.031 in.	-0/+0.157 in.	-0/+0.157 in.
T00913	-0/+0.039 in.	-0/+0.157 in.	-0/+0.157 in.
T00914	-0/+0.039 in.	-0/+0.157 in.	-0/+0.157 in.
T00915	-0/+0.039 in.	-0/+0.157 in.	-0/+0.157 in.
T00136	-0/+0.017 in.	-0/+0.157 in.	-0/+0.157 in.

T00130-1	-0/+0.017 in.	-0/+0.157 in.	-0/+0.157 in.
T00129-1	-0/+0.017 in.	-0/+0.157 in.	-0/+0.157 in.
T01179	-0/+0.023 in.	-0/+0.157 in.	-0/+0.157 in.
T01180	-0/+0.023 in.	-0/+0.157 in.	-0/+0.157 in.
T01187	-0/+0.031 in.	-0/+0.157 in.	-0/+0.157 in.
T01192	-0/+0.017 in.	-0/+0.157 in.	-0/+0.157 in.
T01193	-0/+0.017 in.	-0/+0.157 in.	-0/+0.157 in.
T00861	-0/+0.020 in.	-0/+0.157 in.	-0/+0.157 in.
T00862	-0/+0.020 in.	-0/+0.157 in.	-0/+0.157 in.
T00863	-0/+0.020 in.	-0/+0.157 in.	-0/+0.157 in.
T00864	-0/+0.020 in.	-0/+0.157 in.	-0/+0.157 in.
T01205	-0/+0.023 in.	-0/+0.157 in.	-0/+0.157 in.
T01206	-0/+0.023 in.	-0/+0.157 in.	-0/+0.157 in.
T01236	-0/+0.039 in.	-0/+0.157 in.	-0/+0.157 in.
T01241	-0/+0.039 in.	-0/+0.157 in.	-0/+0.157 in.
T00191	-0/+0.060 in.	-0/+0.157 in.	-0/+0.157 in.
T00192	-0/+0.060 in.	-0/+0.157 in.	-0/+0.157 in.
T00193	-0/+0.060 in.	-0/+0.157 in.	-0/+0.157 in.

1/2AA tolerances apply

5. SQUARENESS: Maximum difference between diagonals (Inches):

Lengths 96.5 inches	0.040xwidth, ft
Lengths 144.5 inches	0.065xwidth, ft

6. FLATNESS: Allowable deviation from flat (Inches):

Longitudinal flatness 3/32 inch in any 6 ft. or less	Short span flatness	
	0.375-0.600 in.	0.050 inch in any 2 ft. or less
	0.625-2.0 in.	0.036 inch in any 2 ft. or less
Transverse flatness		
Thickness: 0.375-0.5 in.	3/16 in.	
Width: 45.5-60.5 in.		
Thickness: 0.625-1.0 in.	5/32 in.	
Width: 45.5 in.		
Thickness: 2.0 in.	3/32 in.	
Width: 45.5-60.5 in.		

7. Lateral Bow: Max deviation from a straight edge: 0.1 inch

1/2AA tolerances apply

8. Surface quality:

- ◆ Brushed finish.
- ◆ Edge burr must be small enough not to cause interference when packing.
- ◆ Scratches that cannot be felt with the fingernail are acceptable on the surfaces.
- ◆ Max number of indentations: 1 in any surface area measuring 3ftx3ft.

9. Packing: On wooden pallet, securely for export, with suitable desiccant included (6 bags at least).



10. Plate Marking: Each plate will be line marked showing the following:

- ◆ Alloy and temper
- ◆ Nominal thickness (inches)
- ◆ Lot No.
- ◆ Specification: ASTM-B209 AMS 4027 ASME-SB209 AMS-QQA 250/11
- ◆ Producer: NELA

11. Labeling: Each pack shall be labelled with the following information:

- ◆ Aluminium Alloy Plate
- ◆ Customer:
- ◆ Alloy & Temper
- ◆ Size (inches):
- ◆ Order No.
- ◆ Pallet No.
- ◆ Made In China
- ◆ Lot number
- ◆ N. W. (kg)
- ◆ G. W. (kg)
- ◆ No. of PCS

MATERIAL CONFORMS AMS-QQA250/11, AMS 4027, ASTM B209 SB-209 IN ALL RESPECTS

CHIEF INSPECTOR:



MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M6061H65.250
 DATE: APR 23 2018

PO / BATCH NO.: 039632 / 5064690

MATERIAL CERT REC'D: Yes
 QUANTITY RECEIVED: 32 PIR
 QUANTITY INSPECTED: 32 PIR
 QUANTITY REJECTED: 0

THICKNESS ORDERED: .250
 THICKNESS RECEIVED: .250
 SHEET SIZE ORDERED: 4X8
 SHEET SIZE RECEIVED: 4X8

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	
CORRECT FINISH	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	
CORROSION	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	<u>Astm B209</u>
CORRECT THICKNESS	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	
PHOTO REQUIRED	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	<u>Heat # 003934</u>
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>DAS 11</u> DATE: <u>9-8 APR 23 2018</u>	SIGNED OFF BY: _____ DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

SPECIFICATION CONTROL DRAWING

△ PURCHASE MATERIAL: 6061-T6/T62/T651 ALUMINUM SHEET OR PLATE

SPECIFICATION: QQ-A-250/11 OR AMS-QQ-A-250/11
OR AMS-4025 OF H027
OR ASTM B209

△ PART NUMBER: M6061T6S|XXX|X|W|WWW|
|THK| |WIDTH|

WHERE "XXX" = THICKNESS (IN INCHES)
AND "W|WWW" = WIDTH (IN INCHES, OPTIONAL, FOR SPECIFYING CUT PLATE)

EG. 0.063" THICK SHEET = M6061T6S.063

EG. 3.5" WIDE BY 0.500" THICK PLATE = M6061T6S.500X3.500

△ PREFERRED SIZE: .XXX BY 4FT BY 8FT FOR SHEET

RELEASED
2018 MAR 13
EJ 18-695

APPROVED

C	ADD PLATE AND T651 SPEC	ML	17.12.13
B	REFORMAT DWG, ADD B209 SPEC (ZN D8-1), REF PAR 08-020A	CP	08.07.13
A	NEW ISSUE	RF	01.06.08
REV.	DESCRIPTION	BY	DATE
DESIGN	DS		
DRAWN	ML		
CHECKED	NO		
MFG. APPR.	JFS		
APPROVED	HS		
DE APPR.	CP		
DATE	17.12.13		

DART AEROSPACE LTD HAYKESBURY, ONTARIO, CANADA	
DRAWING NO.	M6061T6S
REV. C	
SHEET 1 OF 1	
TITLE	6061-T6 SHEET/PLATE SPEC
SCALE	NTS
COPYRIGHT © 2011 BY DART AEROSPACE LTD THIS DOCUMENT IS UNCLASSIFIED AND CONFIDENTIAL. THE EXPRESS OR IMPLIED WARRANTY IS NOT TO BE USED FOR ANY PURPOSE OR TO BE REPRODUCED IN ANY MANNER WITHOUT THE WRITTEN PERMISSION OF DART AEROSPACE LTD.	

MILL TEST/QUALITY CONTROL CERTIFICATE

ALNAN ALUMINIUM INC.

No.55 TingHong Road Nanning, Guangxi, 530031, China

CUSTOMER
EMPIRE RESOURCES, INC.

ADDRESS
ONE PARKER PLAZA 400 KELBY STREET FORT LEE, NEW JERSEY 07024 USA

PRODUCT TYPE
ALUMINIUM SHEET

DATE: January 01, 2015

UNIQUE Lot Number	HEAT Number	Dimension (mm)	Dimension (inch)	Act Thick (mm)	Act Thick (inch)	Weight MT	Alloy	Temper	Al	Cu	Mg	Si	Fe	Mn	Zn	Ti	Cr	Elong (%)	UTS ksi	Yr
Standard	Standard	6.30-12.50	0.248-0.492				6061	T651	remainder	0.15-0.40	0.8-1.2	0.40-0.8	0.7max.	0.15max.	0.20max.	0.15max.	0.04-0.35	10min.	42min.	35n
Standard	Standard	12.50-25.0	0.492-0.984				6061	T651	remainder	0.15-0.40	0.8-1.2	0.40-0.8	0.7max.	0.15max.	0.20max.	0.15max.	0.04-0.35	8min.	42min.	35n
Standard	Standard	25.0-50.0	0.984-1.968				6061	T651	remainder	0.15-0.40	0.8-1.2	0.40-0.8	0.7max.	0.15max.	0.20max.	0.15max.	0.04-0.35	7min.	42min.	35n
2015020101	003919	6.35*1231.9*2451.1	0.25*48.5*96.5	6.53	0.257	1.703	6061	T651	remainder	0.28	0.97	0.71	0.38	0.10	0.10	0.08	0.19	14.5	46.4	41
2015020101	003936	6.35*1231.9*2451.1	0.25*48.5*96.5	6.53	0.257	0.531	6061	T651	remainder	0.25	0.93	0.61	0.29	0.07	0.08	0.04	0.21	15.5	45.1	40
2015020102	003934	6.35*1231.9*2451.1	0.25*48.5*96.5	6.52	0.257	2.143	6061	T651	remainder	0.25	0.93	0.61	0.29	0.07	0.08	0.04	0.21	16.0	45.3	40
2015020103	003572	6.35*1231.9*2451.1	0.25*48.5*96.5	6.56	0.258	1.677	6061	T651	remainder	0.32	1.0	0.76	0.40	0.10	0.12	0.06	0.14	15.0	48.0	43
2015020103	003936	6.35*1231.9*2451.1	0.25*48.5*96.5	6.53	0.257	0.525	6061	T651	remainder	0.25	0.93	0.61	0.29	0.07	0.08	0.04	0.21	16.0	45.1	40
2015020104	003572	6.35*1231.9*2451.1	0.25*48.5*96.5	6.56	0.258	2.264	6061	T651	remainder	0.32	1.0	0.76	0.40	0.10	0.12	0.06	0.14	15.0	48.0	43
2015020105	003726	6.35*1231.9*2451.1	0.25*48.5*96.5	6.58	0.259	1.452	6061	T651	remainder	0.28	0.98	0.69	0.35	0.08	0.09	0.05	0.13	16.0	46.3	41
2015020105	003936	6.35*1231.9*2451.1	0.25*48.5*96.5	6.53	0.257	0.698	6061	T651	remainder	0.25	0.93	0.61	0.29	0.07	0.08	0.04	0.21	15.5	45.1	40
2015020105	003572	6.35*1231.9*2451.1	0.25*48.5*96.5	6.56	0.258	0.107	6061	T651	remainder	0.32	1.0	0.76	0.40	0.10	0.12	0.06	0.14	15.0	48.0	43
2015020106	003680	6.35*1231.9*2451.1	0.25*48.5*96.5	6.57	0.259	1.785	6061	T651	remainder	0.29	0.98	0.75	0.40	0.11	0.12	0.05	0.10	15.0	50.0	45
2015020106	003727	6.35*1231.9*2451.1	0.25*48.5*96.5	6.57	0.259	0.378	6061	T651	remainder	0.28	0.98	0.69	0.35	0.08	0.09	0.05	0.13	15.5	53.1	48
2015020107	003946	6.35*1536.7*3670.3	0.25*60.5*144.5	6.57	0.259	2.108	6061	T651	remainder	0.27	1.00	0.61	0.29	0.09	0.10	0.04	0.19	16.5	45.8	40
2015020108	003717	6.35*1536.7*3670.3	0.25*60.5*144.5	6.65	0.261	2.250	6061	T651	remainder	0.27	0.98	0.61	0.36	0.09	0.13	0.06	0.17	15.0	48.0	43
2015020109	003718	6.35*1536.7*3670.3	0.25*60.5*144.5	6.59	0.259	2.238	6061	T651	remainder	0.26	1.01	0.64	0.35	0.09	0.13	0.05	0.20	15.5	45.0	39
2015020111	003718	6.35*1536.7*3670.3	0.25*60.5*144.5	6.59	0.259	2.234	6061	T651	remainder	0.26	1.01	0.64	0.35	0.09	0.13	0.05	0.20	15.5	45.0	39

ORIGIN OF GOODS AS ALNAN ALUMINIUM INC.

ACTUAL MILL CHEMICAL AND MECHANICAL PROPERTY TEST REPORTS IN IMPERIAL NOMENCLATURE REQUIRED PER SKID
MATERIAL CONFORMS FOR ALLOY 6061, T651, AS PER AMS QQA 250/11, AMS 4021, ASTM-B209-08-209 AND ALUMINIUM ASSOCIATION STANDARDS IN ALL ASPECTS
COUNTRY OF MELT AND MANUFACTURE: CHINA

Issued by [Signature]

Reviewed by [Signature]

SALES
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CHU

MILL TEST/QUALITY CONTROL CERTIFICATE

ALNAN ALUMINIUM INC.

No.55 TingHong Road Nanning, Guangxi,530031, China

CUSTOMER	ADDRESS	PRODUCT TYPE	DATE: February 01,2015
EMPIRE RESOURCES, INC.	ONE PARKER PLAZA 400 KELBY STREET FORT LEE, NEW JERSEY 07024 USA	ALUMINUM SHEET	

UNIQUE Lot Number	HEAT Number	Dimension (mm)	Dimension (inch)	Act Thick (mm)	Act Thick (inch)	Weight MT	Alloy	Temper	Al	Cu	Mg	Si	Fe	Mn	Zn	Ti	Cr	Elong (%)	UTS ksi	Yf. k
Standard	Standard	6.30-12.50	0.248-0.492				6061	T651	remainder	0.15-0.40	0.8-1.2	0.40-0.8	0.7max	0.15max	0.20max	0.15max	0.04-0.35	10min	42min	35f
Standard	Standard	12.50-25.0	0.492-0.984				6061	T651	remainder	0.15-0.40	0.8-1.2	0.40-0.8	0.7max	0.15max	0.20max	0.15max	0.04-0.35	8min	42min	35f
Standard	Standard	25.0-50.0	0.984-1.968				6061	T651	remainder	0.15-0.40	0.8-1.2	0.40-0.8	0.7max	0.15max	0.20max	0.15max	0.04-0.35	7min	42min	35f
2015020112	003946	6.35*1536.7*3670.3	0.25*60.5*144.5	6.57	0.259	2.244	6061	T651	remainder	0.27	1.00	0.61	0.29	0.09	0.10	0.04	0.19	16.5	45.8	40
2015020113	003530	6.35*1536.7*3670.3	0.25*60.5*144.5	6.57	0.259	1.428	6061	T651	remainder	0.29	0.96	0.72	0.38	0.09	0.08	0.05	0.13	15.5	47.4	42
2015020113	003946	6.35*1536.7*3670.3	0.25*60.5*144.5	6.57	0.259	0.816	6061	T651	remainder	0.27	1.00	0.61	0.29	0.09	0.10	0.04	0.19	16.5	45.8	40
2015020114	003530	6.35*1536.7*3670.3	0.25*60.5*144.5	6.57	0.259	2.238	6061	T651	remainder	0.29	0.96	0.72	0.38	0.09	0.08	0.05	0.13	15.5	47.4	42
2015020115	003947	6.35*1536.7*3670.3	0.25*60.5*144.5	6.62	0.261	2.193	6061	T651	remainder	0.24	0.98	0.60	0.30	0.08	0.10	0.04	0.21	15.5	45.2	40
2015020116	003942	6.35*1536.7*3670.3	0.25*60.5*144.5	6.49	0.255	2.197	6061	T651	remainder	0.24	0.98	0.60	0.30	0.08	0.10	0.04	0.21	15.0	43.9	35
2015020117	003942	6.35*1536.7*3670.3	0.25*60.5*144.5	6.49	0.255	2.195	6061	T651	remainder	0.24	0.98	0.60	0.30	0.08	0.10	0.04	0.21	15.0	43.9	35
2015020118	003717	6.35*1536.7*3670.3	0.25*60.5*144.5	6.65	0.261	2.241	6061	T651	remainder	0.27	0.98	0.61	0.36	0.09	0.13	0.06	0.17	15.0	48.0	42
2015020119	003717	6.35*1536.7*3670.3	0.25*60.5*144.5	6.65	0.261	1.618	6061	T651	remainder	0.27	0.98	0.61	0.36	0.09	0.13	0.06	0.17	15.0	48.0	42
2015020119	003948	6.35*1536.7*3670.3	0.25*60.5*144.5	6.50	0.255	0.607	6061	T651	remainder	0.24	0.98	0.60	0.30	0.08	0.10	0.04	0.21	16.0	45.1	35
2015020120	003947	6.35*1536.7*3670.3	0.25*60.5*144.5	6.62	0.261	2.242	6061	T651	remainder	0.24	0.98	0.60	0.30	0.08	0.10	0.04	0.21	15.5	45.2	40
2015020121	003718	6.35*1536.7*3670.3	0.25*60.5*144.5	6.59	0.259	2.226	6061	T651	remainder	0.26	1.01	0.64	0.35	0.09	0.13	0.05	0.20	15.5	45.0	35
2015020122	003944	6.35*1536.7*3670.3	0.25*60.5*144.5	6.55	0.258	2.185	6061	T651	remainder	0.27	1.00	0.61	0.29	0.09	0.10	0.04	0.19	16.0	45.0	35

ORIGIN OF GOODS AS ALNAN ALUMINIUM INC.
 ACTUAL MILL, CHEMICAL AND MECHANICAL PROPERTY TEST REPORTS IN IMPERIAL NOMENCLATURE REQUIRED PER SKID
 MATERIAL CONFORMS FOR ALLOY 6061, T651, AS PER AMS QQA 250/11, AMS 4027, ASTM-B209 9B-209 AND ALUMINUM ASSOCIATION STANDARDS IN ALL ASPECTS.
 COUNTRY OF MELT AND MANUFACTURE: CHINA

Issued by [Signature]

Reviewed by [Signature]

2/2 Sarah Skos

REQU LE 11 SEP. 2013

MILIT. TEST/QUALITY CONTROL CERTIFICATE
ALNAN ALUMINIUM INC.

No.55 TingHong Road Nanning, Guangxi, 530031, China

CUSTOMER
EMPIRE RESOURCES, INC.

ADDRESS
ONE PARKER PLAZA 400 KELBY STREET FORT LEE, NEW JERSEY 07024 USA

PRODUCT TYPE
ALUMINIUM SHEET

DATE: January 31, 2015

UNIQUE Lot Number	HEAT Number	Dimension (mm)	Dimension (inch)	Act Thick (mm)	Act Thick (inch)	Weight MT	Alloy	Temper	Al	Cu	Mg	Si	Fe	Mn	Zn	Ti	Cr	Elong (%)	UTS ksi	Yr
Standard	Standard	6.30-12.50	0.248-0.492				6061	T651	remainder	0.15-0.40	0.8-1.2	0.10-0.8	0.7max	0.15max	0.20max	0.15max	0.04-0.35	10min.	42min.	35r
Standard	Standard	12.50-25.0	0.492-0.984				6061	T651	remainder	0.15-0.40	0.8-1.2	0.10-0.8	0.7max	0.15max	0.20max	0.15max	0.04-0.35	8min.	42min.	35r
Standard	Standard	25.0-50.0	0.984-1.968				6061	T651	remainder	0.15-0.40	0.8-1.2	0.10-0.8	0.7max	0.15max	0.20max	0.15max	0.04-0.35	7min.	42min.	35r
2015012709	003839	6.35*1231.9*3670.3	0.25*48.5*144.5	6.51	0.256	1.922	6061	T651	remainder	0.32	1.00	0.76	0.40	0.10	0.12	0.06	0.14	14.0	51.6	47
2015012710	003933	6.35*1231.9*3670.3	0.25*48.5*144.5	6.52	0.257	2.236	6061	T651	remainder	0.25	0.94	0.61	0.30	0.07	0.08	0.05	0.21	15.5	45.3	46
2015012711	003916	6.35*1231.9*3670.3	0.25*48.5*144.5	6.50	0.256	1.596	6061	T651	remainder	0.29	0.96	0.75	0.36	0.12	0.12	0.05	0.09	14.0	330	2
2015012712	003836	6.35*1231.9*3670.3	0.25*48.5*144.5	6.47	0.255	2.287	6061	T651	remainder	0.25	0.97	0.68	0.33	0.11	0.11	0.05	0.21	14.5	45.3	46
2015012713	003933	6.35*1231.9*3670.3	0.25*48.5*144.5	6.52	0.257	2.224	6061	T651	remainder	0.25	0.94	0.61	0.30	0.07	0.08	0.05	0.21	15.5	45.3	46
2015012714	003915	6.35*1231.9*3670.3	0.25*48.5*144.5	6.53	0.257	2.242	6061	T651	remainder	0.25	0.97	0.68	0.33	0.11	0.11	0.05	0.21	14.5	46.1	4
2015012714	003915	6.35*1231.9*3670.3	0.25*48.5*144.5	6.53	0.257	2.244	6061	T651	remainder	0.25	0.97	0.68	0.33	0.11	0.11	0.05	0.21	14.5	46.1	4
2015012716	003911	6.35*1231.9*3670.3	0.25*48.5*144.5	6.53	0.257	2.240	6061	T651	remainder	0.25	0.94	0.61	0.30	0.07	0.08	0.05	0.21	15.5	45.3	46
2015012717	003835	6.35*1231.9*3670.3	0.25*48.5*144.5	6.52	0.257	0.321	6061	T651	remainder	0.25	0.96	0.68	0.31	0.10	0.08	0.05	0.21	16.0	46.4	4
2015012717	003835	6.35*1231.9*3670.3	0.25*48.5*144.5	6.52	0.257	1.913	6061	T651	remainder	0.27	0.94	0.70	0.39	0.11	0.11	0.05	0.22	15.0	46.8	4
2015012717	003833	6.35*1231.9*3670.3	0.25*48.5*144.5	6.52	0.257	2.232	6061	T651	remainder	0.25	0.93	0.61	0.29	0.07	0.08	0.04	0.21	15.5	45.1	4
2015012719	003936	6.35*1231.9*2451.1	0.25*48.5*96.5	6.53	0.257	2.234	6061	T651	remainder	0.25	0.93	0.61	0.29	0.07	0.08	0.04	0.21	15.5	45.1	4
2015012720	003936	6.35*1231.9*2451.1	0.25*48.5*96.5	6.53	0.257	2.234	6061	T651	remainder	0.25	0.93	0.61	0.29	0.07	0.08	0.04	0.21	15.5	45.1	4
2015012745	003933	6.35*1231.9*3670.3	0.25*48.5*144.5	6.52	0.257	1.625	6061	T651	remainder	0.28	0.97	0.71	0.38	0.10	0.10	0.08	0.19	14.5	46.4	4
2015012721	003919	6.35*1231.9*2451.1	0.25*48.5*96.5	6.53	0.257	2.233	6061	T651	remainder	0.25	0.97	0.69	0.31	0.07	0.08	0.04	0.21	16.0	47.3	4
2015012722	003931	7.95*1231.9*3670.3	0.313*48.5*144.5	8.15	0.321	2.20	6061	T651	remainder	0.25	0.97	0.69	0.31	0.07	0.08	0.04	0.21	16.0	47.3	4
2015012723	003931	7.95*1231.9*3670.3	0.313*48.5*144.5	8.15	0.321	2.198	6061	T651	remainder	0.25	0.97	0.69	0.31	0.07	0.08	0.04	0.21	16.0	47.3	4

ORIGIN OF GOODS AS ALNAN ALUMINIUM INC.
ACTUAL MILL CHEMICAL AND MECHANICAL PROPERTY TEST REPORTS IN IMPERIAL NOMENCLATURE REQUIRED PER SKIIL
MATERIAL CONFORMS FOR ALLOY 6061, T651, AS PER AMS QQA 250/11, AMS 4027, ASTM-B209 SB-209 AND ALUMINIUM ASSOCIATION STANDARDS IN ALL ASPECTS
COUNTRY OF MELT AND MANUFACTURE: CHINA

Issued by

Reviewed by

1/3

Sarah Shen

PHL-484666
66084

MILL TEST/QUALITY CONTROL CERTIFICATE

ALNAN ALUMINIUM INC.

No.55 TingHong Road Nanning Guangxi,530031,China

CUSTOMER
EMPIRE RESOURCES, INC.

ADDRESS
ONE PARKER PLAZA 400 KELBY STREET FORT LEE, NEW JERSEY 07024 USA

PRODUCT TYPE
ALUMINIUM SHEET

DATE: January 31,2015

UNIQUE Lot Number	HEAT Number	Dimension (mm)	Dimension (inch)	Act Thick (mm)	Act Thick (inch)	Weight MT	Alloy	Temper	AI	Cu	Mg	Si	Fe	Mn	Zn	Ti	Cr	Elong (%)	UTS ksi	Y _u k
Standard	Standard	630-1250	0.248-0.492				6061	T651	remainder	0.15-0.40	0.8-1.2	0.40-0.8	0.7max	0.15max	0.20max	0.15max	0.04-0.35	10min	42min	35t
Standard	Standard	12.50-25.0	0.492-0.984				6061	T651	remainder	0.15-0.40	0.8-1.2	0.40-0.8	0.7max	0.15max	0.20max	0.15max	0.04-0.35	8min	42min	35t
Standard	Standard	25.0-50.0	0.984-1.968				6061	T651	remainder	0.15-0.40	0.8-1.2	0.40-0.8	0.7max	0.15max	0.20max	0.15max	0.04-0.35	7min	42min	35t
2015012724	003931	7.95*1231.9*3670.3	0.313*48.5*144.5	8.15	0.321	2.196	6061	T651	remainder	0.25	0.97	0.69	0.31	0.07	0.08	0.04	0.21	16.0	47.3	42
2015012725	003720	7.95*1536.7*3670.3	0.313*60.5*144.5	8.16	0.321	2.284	6061	T651	remainder	0.26	1.01	0.64	0.35	0.09	0.13	0.05	0.20	16.0	44.5	38
2015012726	003720	7.95*1536.7*3670.3	0.313*60.5*144.5	8.16	0.321	2.282	6061	T651	remainder	0.26	1.01	0.64	0.35	0.09	0.13	0.05	0.20	16.0	44.5	38
2015012727	003930	9.53*1231.9*3670.3	0.375*48.5*144.5	9.73	0.383	2.50	6061	T651	remainder	0.26	0.97	0.63	0.32	0.06	0.07	0.04	0.20	15.0	45.3	41
2015012728	003930	9.53*1231.9*3670.3	0.375*48.5*144.5	9.73	0.383	2.502	6061	T651	remainder	0.26	0.97	0.63	0.32	0.06	0.07	0.04	0.20	15.0	45.3	41
2015012729	003938	12.7*1231.9*3670.3	0.5*48.5*144.5	13.16	0.518	2.258	6061	T651	remainder	0.24	0.96	0.57	0.33	0.06	0.05	0.04	0.17	17.0	47.9	42
2015012730	003953	12.7*1231.9*3670.3	0.5*48.5*144.5	13.26	0.522	2.308	6061	T651	remainder	0.23	0.96	0.57	0.28	0.08	0.07	0.05	0.21	17.5	45.9	40
2015012731	003953	12.7*1231.9*3670.3	0.5*48.5*144.5	13.26	0.522	2.294	6061	T651	remainder	0.23	0.96	0.57	0.28	0.08	0.07	0.05	0.21	17.5	45.9	40
2015012732	003994	12.7*1231.9*3670.3	0.5*48.5*144.5	13.24	0.521	1.828	6061	T651	remainder	0.27	0.97	0.65	0.30	0.06	0.15	0.04	0.21	17.0	48.2	42
2015012733	003823	12.7*1536.7*3670.3	0.5*60.5*144.5	13.09	0.515	2.842	6061	T651	remainder	0.23	0.96	0.57	0.28	0.08	0.07	0.05	0.21	19.5	45.8	40
2015012734	003994	12.7*1231.9*3670.3	0.5*48.5*144.5	13.24	0.521	2.312	6061	T651	remainder	0.27	0.97	0.65	0.30	0.06	0.15	0.04	0.21	17.0	48.2	42
2015012735	003995	12.7*1231.9*3670.3	0.5*48.5*144.5	13.22	0.520	2.306	6061	T651	remainder	0.27	0.97	0.65	0.30	0.06	0.15	0.04	0.21	16.5	47.6	40
2015012736	003954	12.7*1231.9*3670.3	0.5*48.5*144.5	13.25	0.522	1.80	6061	T651	remainder	0.23	0.96	0.57	0.28	0.08	0.07	0.05	0.21	16.5	46.4	40
2015012737	003956	12.7*1231.9*3670.3	0.5*48.5*144.5	13.10	0.516	2.276	6061	T651	remainder	0.23	0.96	0.57	0.28	0.08	0.07	0.05	0.21	18.0	45.5	40
2015012738	003954	12.7*1231.9*3670.3	0.5*48.5*144.5	13.25	0.522	2.296	6061	T651	remainder	0.23	0.96	0.57	0.28	0.08	0.07	0.05	0.21	16.5	46.4	40
2015012739	003995	12.7*1231.9*3670.3	0.5*48.5*144.5	13.22	0.520	1.812	6061	T651	remainder	0.27	0.97	0.65	0.30	0.06	0.15	0.04	0.21	16.5	47.6	40

ORIGIN OF GOODS AS ALNAN ALUMINIUM INC.
ACTUAL MILL CHEMICAL AND MECHANICAL PROPERTY TEST REPORTS IN IMPERIAL NOMENCLATURE REQUIRED PER SKID
MATERIAL CONFORMS FOR ALLOY 6061, T651, AS PER AMS QQA 250/1, AMS 4027, ASTM-B209 SB-209 AND ALUMINIUM ASSOCIATION STANDARDS IN ALL ASPECTS.
COUNTRY OF MELT AND MANUFACTURE: CHINA

Issued by

12/1/17

Reviewed by

12/1/17

Sarah SPN

MILL TEST/QUALITY CONTROL CERTIFICATE

ALNAN ALUMINIUM INC.

No.55 TingHong Road Nanning, Guangxi, 530031, China

CUSTOMER
EMPIRE RESOURCES, INC.

ADDRESS
ONE PARKER PLAZA 400 KELBY STREET FORT LEE, NEW JERSEY 07024 USA

PRODUCT TYPE
ALUMINIUM SHEET

DATE: January 31, 2015

UNIQUE Lot Number	HEAT Number	Dimension (mm)	Dimension (inch)	Act Thick (mm)	Act Thick (inch)	Weight MT	Alloy	Temper	Al	Cu	Mg	Si	Fe	Mn	Zn	Ti	Cr	Elong (%)	UTS ksi	Yk
Standard	Standard	6.30-12.50	0.248-0.492				6061	T651	remainder	0.15-0.40	0.8-1.2	0.40-0.8	0.7max	0.15max	0.20max	0.15max	0.04-0.35	10min	42min	350
Standard	Standard	12.50-25.0	0.492-0.984				6061	T651	remainder	0.15-0.40	0.8-1.2	0.40-0.8	0.7max	0.15max	0.20max	0.15max	0.04-0.35	8min	42min	350
Standard	Standard	25.0-50.0	0.984-1.968				6061	T651	remainder	0.15-0.40	0.8-1.2	0.40-0.8	0.7max	0.15max	0.20max	0.15max	0.04-0.35	7min	42min	350
2015012740	003930	9.53*1231.9*3670.3	0.375*48.5*144.5	9.73	0.383	2.15	6061	T651	remainder	0.26	0.97	0.63	0.32	0.06	0.07	0.04	0.20	15.0	45.3	41
2015012741	003932	9.53*1231.9*3670.3	0.375*48.5*144.5	9.74	0.383	2.148	6061	T651	remainder	0.25	0.97	0.69	0.31	0.08	0.08	0.04	0.21	16.0	46.0	42
2015012742	003720	7.93*1536.7*3670.3	0.313*60.5*144.5	8.16	0.321	2.272	6061	T651	remainder	0.26	1.01	0.64	0.35	0.09	0.13	0.05	0.20	16.0	44.5	38
2015012743	003918	6.35*1231.9*3670.3	0.25*48.5*144.5	6.60	0.260	0.886	6061	T651	remainder	0.28	0.96	0.68	0.39	0.10	0.10	0.05	0.17	14.5	47.1	45
2015012743	003841	6.35*1231.9*3670.3	0.25*48.5*144.5	6.52	0.157	1.45	6061	T651	remainder	0.26	0.96	0.70	0.34	0.12	0.15	0.05	0.20	14.0	46.1	4
2015012746	003836	6.35*1231.9*3670.3	0.25*48.5*144.5	6.47	0.255	2.24	6061	T651	remainder	0.25	0.97	0.68	0.33	0.11	0.11	0.05	0.21	14.5	45.3	40
2015012747	003836	6.35*1231.9*3670.3	0.25*48.5*144.5	6.47	0.255	0.32	6061	T651	remainder	0.25	0.97	0.68	0.33	0.11	0.11	0.05	0.21	14.5	45.3	40
2015012747	003842	6.35*1231.9*3670.3	0.25*48.5*144.5	6.57	0.260	1.922	6061	T651	remainder	0.28	0.96	0.68	0.39	0.10	0.10	0.05	0.17	15.0	45.8	4
2015012749	003918	6.35*1231.9*3670.3	0.25*48.5*144.5	6.60	0.260	2.24	6061	T651	remainder	0.28	0.96	0.68	0.39	0.10	0.10	0.05	0.17	14.5	47.1	4
2015012750	003841	6.35*1231.9*3670.3	0.25*48.5*144.5	6.52	0.157	2.248	6061	T651	remainder	0.26	0.96	0.70	0.34	0.12	0.15	0.05	0.20	14.0	46.1	4
2015012751	003833	6.35*1231.9*3670.3	0.25*48.5*144.5	6.52	0.157	2.08	6061	T651	remainder	0.27	0.94	0.70	0.39	0.11	0.11	0.05	0.22	15.0	46.8	4
2015012752	003835	6.35*1231.9*3670.3	0.25*48.5*144.5	6.52	0.257	2.246	6061	T651	remainder	0.25	0.96	0.68	0.31	0.10	0.08	0.05	0.21	16.0	46.4	4
2015012753	003841	6.35*1231.9*3670.3	0.25*48.5*144.5	6.52	0.157	1.452	6061	T651	remainder	0.26	0.96	0.70	0.34	0.12	0.15	0.05	0.20	14.0	46.1	4
2015012753	003842	6.35*1231.9*3670.3	0.25*48.5*144.5	6.57	0.260	0.806	6061	T651	remainder	0.28	0.96	0.68	0.39	0.10	0.10	0.05	0.17	15.0	45.8	4
2015012754	003918	6.35*1231.9*3670.3	0.25*48.5*144.5	6.60	0.260	1.876	6061	T651	remainder	0.28	0.96	0.68	0.39	0.10	0.10	0.05	0.17	14.5	47.1	4
2015012755	003956	12.7*1231.9*3670.3	0.5*48.5*144.5	13.10	0.516	2.25	6061	T651	remainder	0.23	0.96	0.57	0.28	0.08	0.07	0.05	0.21	18.0	45.5	4
2015012756	003999	12.7*1231.9*2451.1	0.5*48.5*96.5	13.07	0.514	2.354	6061	T651	remainder	0.27	0.97	0.65	0.30	0.06	0.15	0.04	0.21	16.0	47.6	4

ORIGIN OF GOODS AS ALNAN ALUMINIUM INC.
ACTUAL MILL CHEMICAL AND MECHANICAL PROPERTY TEST REPORTS IN IMPERIAL NOMENCLATURE REQUIRED PER SKID
MATERIAL CONFORMS FOR ALLOY 6061, T651, AS PER AMS QQA 250/11, AMS 4027, ASTM-B209 SB-209 AND ALUMINIUM ASSOCIATION STANDARDS IN ALL ASPECTS
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